

# LUCA MENGhini

I am mainly working in the area of occupational health psychology, workplace stress, psychophysiology of stress, recovery & sleep quality. I am mainly interested in research methods to assess sources of stress (e.g., workload) and psychophysiological responses (e.g., mood, heart rate variability) in real time, in participants' natural environment.



## RESEARCH EXPERIENCE

present  
|  
2021



### Postdoctoral Research Fellow

Department of Psychology, University of Bologna

📍 Bologna, IT

- Research Project: State workaholism as a predictor of daily fluctuations in blood pressure, emotional exhaustion, and sleep quality
- Supervisor: Prof. Cristian Balducci

2020



### Visiting Research Fellow

Human Sleep Research Program, SRI International

📍 Menlo Park, CA, USA

- Validity of consumer sleep technology compared to laboratory PSG, daily reciprocal relationships between stress and sleep among adolescents
- Supervisor: Massimiliano de Zambotti PhD

2019



### Research Consultant

Consorzio per il Trasferimento Tecnologico C2T

📍 Milan, IT

- Assessing the role of physical workspace features in employees' health & wellbeing
- Supervisor: Chiara Veneziani PhD



## EDUCATION

2020  
|  
2017



### PhD Candidate in Psychological Sciences

PsychoPhysiology Lab, University of Padova

📍 Padova, IT

- Thesis: Workplace stress in real time: Towards the psychophysiological assessment of stressors and strain under ecological conditions
- Supervisors: Prof. Michela Sarlo, Prof. Massimiliano Pastore

2016  
|  
2014



### MS cum laude in Work, Social & Communication Psychology

University of Padova

📍 Padova, IT

- Thesis: A psychophysiological protocol for workplace stress risk assessment
- Supervisor: Prof. Michela Sarlo

2014  
|  
2011



### BS cum laude in Social & Work Psychology

University of Padova

📍 Padova, IT

- Thesis: Biofeedback training for stress management in organizational contexts
- Supervisor: Prof. Laura Dal Corso

## CONTACT INFO

📍 Padova, Italy

✉ [luca.menghini3@unibo.it](mailto:luca.menghini3@unibo.it)

🐦 [LucaMenghiniPsy](#)

🔗 [github.com/luca-menghini](https://github.com/luca-menghini)

📄 [osf.io/kd7fu/](https://osf.io/kd7fu/)

in [linkedin.com/in/lucamenghini](https://linkedin.com/in/lucamenghini)

## SOFTWARE SKILLS

**R packages:** Rmarkdown, lme4, lavaan, ggplot2, tidyr, shiny

**Other data analysis:** MPLUS

**Signal Processing:** ARTiiFACT, Kubios HRV, Actiware, R

**Data collection:** Qualtrics

Made with the R package [pagedown](#).

The source code is available on [github.com/nstrayer/cv](https://github.com/nstrayer/cv).

Last updated on 2021-03-15.



## RESEARCH GROUPS



### PsychoPhysiology Lab

<https://dpg.unipd.it/en/psyphylab>

📍 Padova, IT



### Psicostat Research Group

<https://psicostat.dpss.psy.unipd.it/>

📍 Padova, IT



## OTHER WORK EXPERIENCE

2017



### Research Intern

PsychoPhysiology Lab, University of Padova

📍 Padova, IT

- Psychophysiological data processing and analysis with R
- Supervisors: Prof. Michela Sarlo, Nicola Cellini PhD

2017

|  
2015



### Psychological Service Intern

Inside Performance - <https://insideperformance.it>

📍 Padova, IT

- Organizational & sports consultancy, stress management & biofeedback
- Supervisor: Marianna Munafò PhD



## TEACHING EXPERIENCE

2020



### Teaching assistant (Psychological Testing)

BS degree Psychological Sciences, University of Padova

📍 Padova, IT

- Chair: Prof. Gianmarco Altoé

2018



### Teaching assistant (General Psychophysiology)

BS degree Psychological Sciences, University of Padova

📍 Padova, IT

- Chair: Prof. Michela Sarlo



## EDUCATIONAL EXPERIENCE

2021



### Data analysis with MPLUS

PhD intensive course, University of Bologna

📍 Bologna, IT

2019



### Modern statistical approaches in psychological sciences

Winter School, University of Padova

📍 Padova, IT

2019



### Intensive longitudinal methods and data analysis

Summer School, University of Aberdeen

📍 Aberdeen, UK

2018



### Data analysis with Shiny R

TquanT Seminar, University of Glasgow

📍 Glasgow, UK

My research skills include:

**Data collection:** daily diaries & experience sampling methods, ambulatory & laboratory assessment of psychophysiological variables and weak/sleep patterns (actigraphy)

**Data analysis:** generalized linear mixed-effects regression models, structural equation models, psychometrics, influential analysis

**Language skills:** Italian (native), English (proficient), French (intermediate)

During my PhD program, I have tutored both bachelor's (2) and master's degree (8) undergraduates.

With each of them, I have tried to raise awareness of the importance of methodological and statistical choices, while encouraging them to use R for both data processing and data analysis.

I am always looking for new educational experiences that can improve my methodological and statistical background.



## HONORS & AWARDS

- 2019 ● **Best scientific contribution award (€500)**  
Italian Association of Psychology (Org. Psy) 📍 Lecce, IT
- 2019 ● **Best Poster Awards (3rd place)**  
Cognitive Science Arena 📍 Brixen, IT
- 2014 ● **Erasmus Scholarship (6 months)**  
Université Catholique de Louvain 📍 Louvain-la-neuve, BE



## REVIEWER CONTRIBUTIONS

- present | 2019 ● **Ad-hoc reviewer (3)**  
*Psychophysiology, International Journal of Psychophysiology, Sleep*



## PEER-REVIEWED PUBLICATIONS

**Menghini, L.**, Yuksel, D., Goldstone, A., Baker, F. C., & de Zambotti, M. (Accepted 2021). Performance of Fitbit Charge 3 against polysomnography in measuring sleep in adolescent boys and girls. *Chronobiology International*

**Menghini, L.**, Cellini, N., Goldstone, A., Baker, F. C., & de Zambotti, M. (2021) A standardized framework for testing the performance of sleep-tracking technology: Step-by-step guidelines and open-source code. *Sleep*, zsa170 <https://doi.org/10.1093/sleep/zsa170>

de Zambotti, M., Cellini, N., **Menghini, L.**, Sarlo, M., & Baker, F. C. (2020). Sensors Capabilities, Performance, and Use of Consumer Sleep Technology. *Sleep Medicine Clinics*, 15(1), 1-30. <https://doi.org/10.1016/j.jsmc.2019.11.003>

Cellini, N., **Menghini, L.**, Mercurio, M., Vanzetti, V., Bergamo, D., & Sarlo, M. (2020). Sleep quality and quantity in Italian University students: an actigraphic study. *Chronobiology International*, 1-14. <https://doi.org/10.1080/07420528.2020.1773494>

**Menghini, L.**, Gianfranchi, E., Cellini, N., Patron, E., Tagliabue, M., & Sarlo, M. (2019). Stressing the accuracy: Wrist-worn wearable sensor validation over different conditions. *Psychophysiology*, 56(11), e13441. <https://doi.org/10.1111/psyp.13441>



## PUBLIC REPOSITORIES

**Menghini, L.**, Cellini, N., Goldstone, A., Baker, F. C., & de Zambotti, M. (2020). Analytical pipeline and functions for testing the performance of sleep-tracking technology v1.0.0. <https://doi.org/10.5281/ZENODO.3762086>

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## CERTIFICATIONS:

2017: **Academic IELTS** (English) score: lv C1, issued by British Council

2017: **HRV Biofeedback** lv 3, issued by Biofeedback Fed. of Europe

2016: **Qualified trainer Work Health & Safety**, issued by AIFES Formazione

Check my verified publications & peer reviews from

<https://publons.com/researcher/3337236/menghini/>

## SELECTED TALKS & POSTER:

**Menghini L.**, Balducci, C., Pastore, M., & Sarlo, M. Work Stress in Real-Time: Validation of Six Scales for the Intensive Longitudinal Assessment of Work Stress and Psychosocial Risk Factors. Talk *EAWOP 2019*, Turin (IT), May 29-31, 2019

**Menghini L.**, et al. Accuracy of a commercial wearable in detecting sleep stages compared to polysomnography in adults: considering sleep classification methods and effects of evening alcohol consumption. Poster *Sleep 2020 Virtual Meeting*, Aug 27-30, 2020.

**Menghini, L.**, Fuochi, G., Cellini, N., & Sarlo, M. Psychophysiology of Everyday Life: Daily Fluctuations in Affective, Cognitive and Physiological Processes. Poster *Cognitive Science Arena*, Brixen (IT), Feb 15-16, 2019.